



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

75 Hawthorne Street
San Francisco, CA 94105-3901

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JUN 16 1995

Mr. Walt Mills
Area Director
Bureau of Indian Affairs
Post Office Box 10
Phoenix, AZ 85001



Dear Mr. Mills,

Enclosed is an Emergency Order issued to the Bureau of Indian Affairs ("BIA") by the United States Environmental Protection Agency, Region IX, Drinking Water Protection Branch (DWPB) regarding known and suspected groundwater and soil contamination at the BIA facility located on the federally recognized Duck Valley Indian Reservation in Owyhee, Nevada.

We are aware that correspondence, dated April 18, 1995, was sent to you from EPA, Region IX's Office of Underground Storage Tanks (USTs) requiring certain actions be taken by the Bureau of Indian Affairs to address possible groundwater and soil contamination related to USTs operated by the BIA at the Owyhee facility. To the extent possible, we will work with you and the Office of Underground Storage Tanks (OUST) to ensure that the BIA need only perform an activity once to satisfy the requirements of both the DWPB and the OUST in areas where the required activities duplicate each other.

We look forward to working with you to address the requirements set forth in the attached Emergency Order. If you have any questions, please Cynthia Sans at (415) 744-1837.

Sincerely,

Loretta K. Barsamian

Loretta K. Barsamian, Chief
Drinking Water Protection Branch

Enclosures

PHOENIX AREA DIRECTOR

JUN 16 1995

BUREAU OF INDIAN AFFAIRS

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

IN THE MATTER OF)	Docket No. UIC-EO-95-001
)	
Walt Mills)	
Area Director)	FINDING OF IMMINENT AND
Bureau of Indian Affairs)	SUBSTANTIAL ENDANGERMENT TO THE
Post Office Box 10)	HEALTH OF PERSONS AND
Phoenix, AZ 85001)	ADMINISTRATIVE ORDER
)	
Respondent.)	
)	
Proceedings under §1431(a)(1))	
of the Safe Drinking Water Act,)	
42 U.S.C. § 300i(a)(1) and 40)	
C.F.R. § 144.27.)	
)	

STATUTORY AUTHORITY

The following Findings are made and Order issued under the authority vested in the Administrator of the U.S. Environmental Protection Agency by §1431(a) of the Safe Drinking Water Act ("the SDWA" or "the Act"), 42 United States Code ("U.S.C.") §300i(a) and 40 Code of Federal Regulations ("C.F.R.") § 144.27. The authority to take these actions has been duly redelegated to the undersigned Chief, Drinking Water Protection Branch, Water Management Division, EPA Region IX ("EPA").

DESCRIPTION OF RESPONDENT

1. The Respondent, the Bureau of Indian Affairs ("BIA") is a federal agency and thus a "person" within the meaning of §1401(12) and §1423(b) of the Act, 42 U.S.C. §300f(12), §300h-2(b).

2. BIA owns and operates a Maintenance Shop ("the Facility") on the federally recognized Duck Valley Reservation in

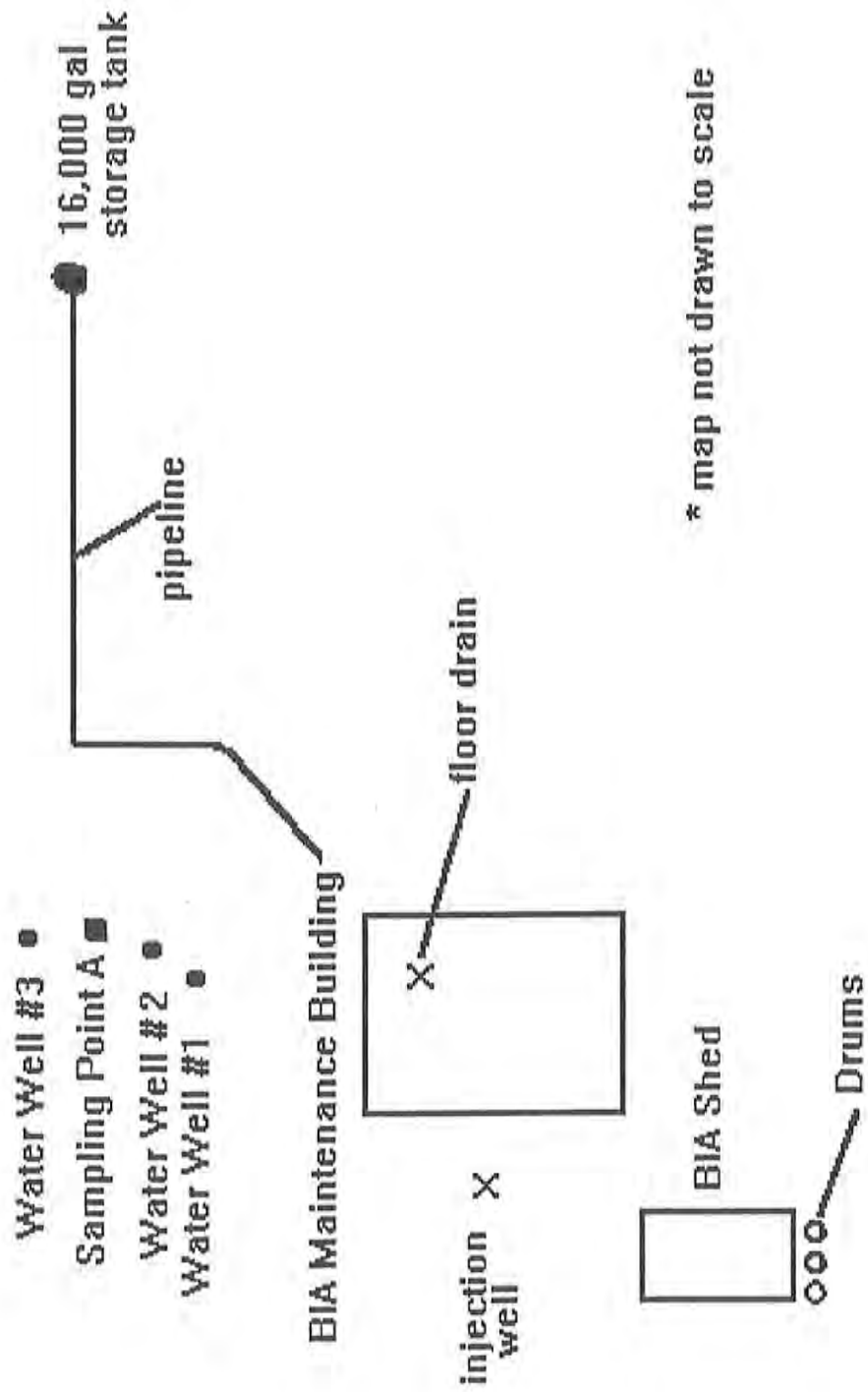
Owyhee, Nevada.

3. BIA has used an on-site shallow injection well ("the disposal well") to dispose of fluids produced while maintaining vehicles at the Facility. This well constitutes an injection well as defined by 40 C.F.R. §144.3. Thus, BIA is the owner and operator of an injection well within the meaning of 40 C.F.R. §144.3.

FINDINGS

4. The disposal well is connected to a floor drain inside the Facility's main maintenance building (see Map #1) and consists of a subsurface pipe leading to a disposal pit area. This well has been used for periodic disposal of wastes at various times since the late 1950's. During an inspection of the Facility conducted on October 19, 1994 ("EPA's October Inspection"), EPA observed a sludge-like substance in the floor drain and took samples of this substance. Results and analysis of these samples are enclosed as Appendix A. These samples indicate that BIA may have disposed of contaminants into the well in a manner that may have endangered the health of persons or risked causing exceedances of primary drinking water regulations under 40 C.F.R. Part 142.

5. BIA has disposed of various waste products, including wastewater from steam cleaning, onto the ground surrounding the maintenance building. This disposal practice has left visible soil staining in various locations indicative of petroleum hydrocarbon contamination.



* map not drawn to scale

6. BIA stores multiple chemical containers inside the maintenance building along with automotive parts and equipment (e.g., leaking batteries), some of which are in deteriorated or deteriorating condition such that additional leaking of chemicals to the floor drain is probable. In addition, BIA has not instituted any procedures for disposing of waste products containing petroleum hydrocarbons and/or metals that would be generated in the course of routine maintenance and cleaning (such as solvent bathing and steam cleaning) other than disposing of these materials into the disposal well or onto the ground surrounding the maintenance building.

7. BIA has performed vehicle maintenance, waste disposal, and chemical storage activities in a "shed area", located southwest of the Facility's main maintenance building (see Map #1). The shed has an unlined dirt floor and is divided into eleven sections. During EPA's October Inspection, it was observed that the soil in many of the sections of the shed was stained with what appeared to be petroleum hydrocarbon contamination. On the soil floor in the southernmost section, a standing pool of black, sludge-like substance is present that preliminary lab results show to contain benzene, toluene, xylene and various unknown compounds and semi-VOCs. In several sections, it was impossible for EPA to conduct a thorough inspection due to drums, containers, and machinery inhibiting access. However, the deteriorating condition of the drums and machinery indicated that other instances of contamination were

probable.

8. BIA has a storage area with approximately forty, 55-gallon drums against the outside southern wall of the shed. During EPA's October Inspection, inspectors observed that these drums were stacked on top of each other, many were unlabelled, and many appeared to be leaking or to have leaked in the past. No containment or berm is present to prevent product from leaking and seeping into the ground. EPA's inventory of labelled drums in this area revealed approximately 14 drums labelled Chevron Delo 400, Motor Oil SAE 15W-40, 2 drums labelled Conoco Fleet SAE 301 Mobile Delvac 1300 SUP 15W-40, 1 drum labelled DYCE Chemical Anti-Freeze and Summer Coolant, 5 drums labelled Golden Bear Division-Witco Crack Filler, and 4 drums labelled Low 30 Lub Oil Eng MIL-L-46152 DGS Stock. The remainder of the drums were unlabelled or unidentifiable.

9. Records also indicate that the Facility owns a subsurface fuel oil pipeline ("pipeline") which is connected to a 16,000 gallon storage tank ("16,000 gallon tank") located approximately 600 feet northeast of the Facility near the old power plant. During its October Inspection, EPA received contradictory statements as to whether the tank and the pipeline were still in use.

10. There is a public water supply pumphouse located approximately 120 feet northeast of the Facility. There is a 30 horsepower public water supply well ("Water Well #1") 20 feet north of the pumphouse and a second 7.5 horsepower well inside

the pumphouse ("Water Well #2"). In 1985, both wells were taken off-line due to petroleum hydrocarbon contamination. A 10 horsepower public water supply well ("Water Well #3"), located 250 feet northeast of the pumphouse, continues to provide drinking water to the community.

11. The aquifer underlying the Facility contains sufficient quantities of water to supply a public water system and contains less than 10,000 ppm total dissolved solids ("TDS"). It is therefore an underground source of drinking water ("USDW") as defined in 40 C.F.R. §144.3.

12. The community of Owyhee, Nevada currently draws water from this aquifer to supply the needs of the community. The depth from the ground surface to the water table fluctuates seasonally between 7.5 and 14 feet. The contamination of the aquifer has already forced closure of Water Wells #1 and #2. The contamination poses further risk to Water Well #3 and future drinking water wells that might be drilled into the formation to supply the community with drinking water.

13. Due to the condition of the Facility as documented in paragraphs 4-9 above, contaminants are present in or likely to enter the USDW and may present an imminent and substantial endangerment to the health of persons.

14. The Duck Valley Reservation has been federally recognized as an Indian Reservation and EPA, therefore, has jurisdiction to enforce all regulations under the SDWA and take all measures necessary to protect the health of persons on the

Reservation. State and local authorities are either unable under applicable law or have not taken all measures necessary to protect the health of persons in this matter.

15. The EPA therefore finds that the Order described below is authorized under §1431 of the SDWA, 42 U.S.C. §300i and 40 C.F.R. §144.27, and is necessary to protect the health of persons.

ORDER

16. Based upon the foregoing facts and findings, taking into account the imminent and substantial endangerment to the health of persons and under authority of §1431 of the SDWA, 42 U.S.C. §300i, and 40 C.F.R. §144.27, I hereby order compliance with the following provisions:

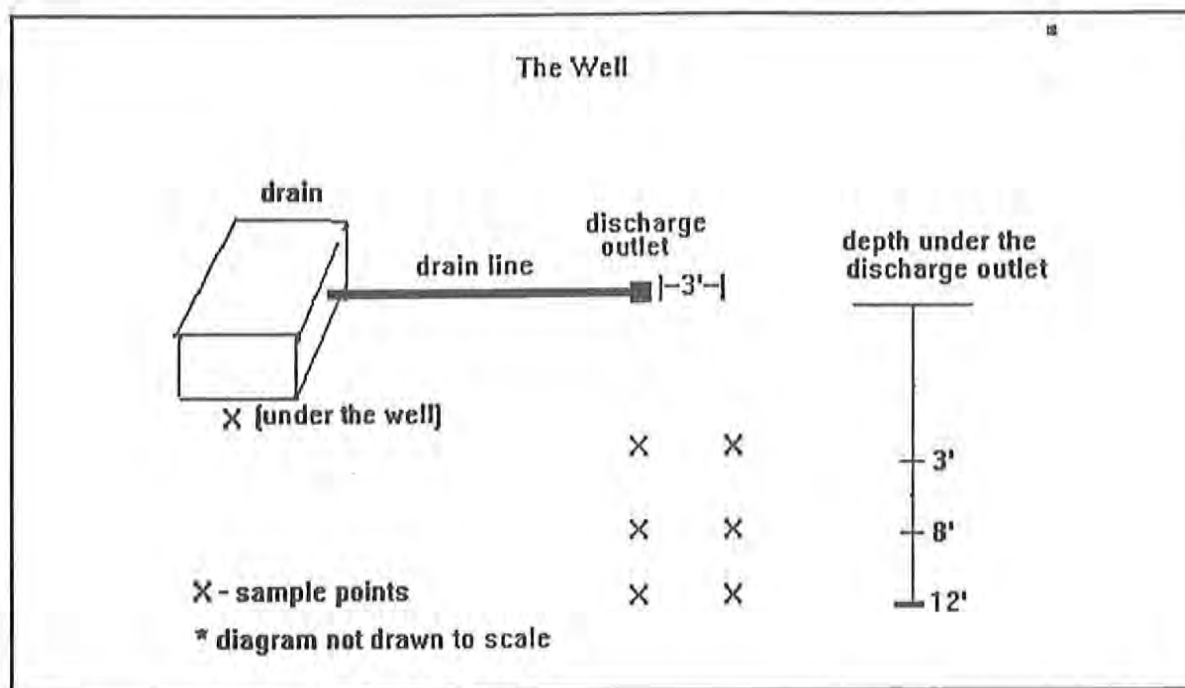
I. Cease Disposal

17. To prevent the continued endangerment of the USDW and to protect the health of persons, BIA shall:

- a. on the effective date of this Order, immediately cease injection of fluids into the disposal well,
- b. cease disposal or draining of waste fluids containing petroleum hydrocarbons, such as steam cleaning wastewater or spent automotive fluids, onto unlined dirt areas of the Facility, and
- c. provide EPA with a written certification within 48 hours of the effective date of this Order that any such injection, disposal or draining activities have ceased.

II. Work Plan

18. Within thirty (30) days of the effective date of this Order, BIA shall submit for EPA's approval a Work Plan covering each of the elements in Paragraphs 21 through 33 of the Order.



The BIA shall retain a professional, registered geologist or civil engineer with experience in performing hydrogeological investigations to prepare and implement the Work Plan.

19. If EPA does not approve the BIA's Work Plan required by the preceding paragraph, the BIA shall submit a new Work Plan incorporating EPA's comments within ten (10) days of receiving notice that the Work Plan is unacceptable.

20. Upon approval by EPA, the Work Plan shall be deemed incorporated into this Order as if fully set forth herein and BIA shall immediately begin implementation of the actions required by the Work Plan.

A. Closure of Disposal Well

21. Identify the location of each drain, drain line, discharge outlet, and/or sump associated with the disposal well.

Information must include the length of the drain line(s), the depth of the drain line(s) below the ground surface, and the distance between the discharge outlet to the top of the water table.

22. Describe the proposed method of removal of the contents of the disposal well and any surrounding contaminated soil, and associated floor drains and lines. BIA must first sample the waste in the disposal well to determine the presence of any constituents which would classify the waste as a Resource Conservation and Recovery Act ("RCRA") hazardous waste, as defined by 40 C.F.R. Part 261. If the waste is characterized as a RCRA hazardous waste, BIA must dispose of all the waste in the disposal well according to all federal, state and local regulations applicable to hazardous waste including, but not limited to, the federal requirements in 40 C.F.R. Parts 262, 266, and/or 279. BIA is ultimately responsible for the proper disposal of all wastes, and should carefully review all arrangements for disposal to ensure compliance with federal, state and local Laws.

23. If the waste is not hazardous under RCRA, BIA must include in the sampling Work Plan, procedures it will take to remove the waste from the disposal well. Information must include the method of removal, the date(s) of removal, the quantity of waste removed, and the final disposal destination. If BIA is not directly removing the waste, BIA must provide documentation from the responsible party testifying to the proper

removal and disposal of the waste from the Facility.

24. Outline a plan for taking representative soil samples in the areas around the disposal well in accordance with the procedures described in 40 C.F.R Part 261 Appendix I "Representative Sampling Methods." A minimum of four (4) samples must be taken in the following locations (see Diagram #1):

- * 1 sample 6" directly below the floor drain in the main maintenance building

- * 3 samples at the point of discharge from the drain line into the disposal well area at depths of 3', 8' and 12'.

25. All samples shall be analyzed by an EPA-approved laboratory for metals, volatile organics, semi-volatile organics, and total recoverable petroleum hydrocarbons ("TRPH"). Upon receipt, copies of all sampling results must be sent to EPA.

26. Describe how the disposal well and associated floor drains and lines will be permanently plugged and sealed. Appendix B contains guidelines for well closure.

27. Submit notification to EPA about the presence of any other injection wells on the Facility. Enclosed as Appendix C is documentation defining an injection well.

B. BIA 16,000 Gallon Storage Tank and Pipeline

28. Outline a plan to conduct testing to determine the integrity of the 16,000 gallon tank and the pipeline. Determine the existence of any fractures or breaks in the pipeline.

29. If the 16,000 gallon tank and pipeline are no longer in use, submit a statement to that effect and investigate the presence of any remaining product in the 16,000 gallon tank

and/or pipeline. If the tank and pipeline do not contain any product, provide certification to that effect to EPA.

30. Outline a plan for conducting a soil-gas survey (or some other method outlined by BIA and subject to EPA approval) to determine the existence of contamination in the area of the pipeline.

31. Describe a plan for follow-up sampling should contaminants be detected.

C. Sample Drinking Water Wells

32. Outline a plan for collecting water samples from drinking water wells #1, #2 and #3. The plan shall provide for quarterly sampling for drinking water wells #1 and #2 and monthly sampling for drinking water well #3.

33. Outline a plan for installing a monitoring well which will enable, among other things, the taking of a sample at the level of the water table. The sample location must be approximately halfway between Water Well #2 and Water Well #3.

34. All samples shall be analyzed by an EPA-approved laboratory for metals, volatile organics, semi-volatile organics, and TRPH. BIA must notify EPA at least fourteen (14) days prior to taking any samples. Upon receipt, copies of all sampling results shall be sent to EPA.

D. Site Characterization

35. Within sixty (60) days of receipt of this Order, submit to EPA the following information about the construction and operation of Water Wells #1, #2, and #3. Submittals for each

well should be summarized in separate documents and the information should correspond to the sequence requested in this Order. Information must include, but is not limited to:

- a. construction information, including date of construction, date of completion, total depth of well from the ground surface, and length of the screened interval;
- b. maximum and average pump rates;
- c. standing water levels; and
- d. length of time the well has been in use, indicating any periods when the well was off-line and the reason it was taken off-line.

36. Documentation may include, but is not limited to, well logs, well schematics, completion schematics, drilling logs, and/or construction data.

37. Within sixty (60) days of receipt of this Order submit to EPA the following information about the hydrogeology of the aquifer and the formation underlying the Facility and the Drinking Water Wells. Information must include, but is not limited to:

- a. a description of the stratified layer of the formation extending down to the lowermost aquifer from which drinking water is drawn; if available indicate the material composition of each layer, its permeability, porosity, hydraulic conductivity and thickness;
- b. a cross-sectional map of the formation, include the points where the Facility and the three wells are located;
- c. the gradient and rate of groundwater flow in the aquifer(s) where wells are located, including any seasonal variations; and
- d. any known fractures or disruptions in the formation which might increase the flow of

contaminants through the aquifer(s).

38. Documentation may include, but is not limited to, geological surveys, engineering reports, and/or regional maps.

39. The Work Plan shall outline a plan to delineate the boundaries of the groundwater contamination, the extent of soil contamination and the source(s) of the soil and groundwater contamination.

E. Site Remediation

40. Within sixty (60) days of receipt of this Order, BIA shall submit to EPA a Work Plan to clean-up and remediate the site. As described further below, BIA shall supplement this Work Plan as new information becomes available indicating the need for particular types of clean-up and other site remediation. Upon receipt of EPA approval, these supplements to the Work Plan shall be deemed incorporated into the Work Plan and the Order.

41. The Work Plan shall provide for proper storage and/or disposal of all the drums on the Facility. BIA must conduct a comprehensive inventory of the drums on the Facility identifying the number of drums, the type of product enclosed, and quantity in each drum. If the condition of the containers does not meet the standard in 40 C.F.R. 264 Subpart I, BIA must include procedures to properly transfer the product(s) and dispose of the drum.

42. The Work Plan must have separate provisions for 1) proper storage of drums that will remain on the Facility and 2) removal and/or disposal of drums containing hazardous or non-

hazardous materials. If any drum(s) contain or contained hazardous waste at any point, BIA must adhere to all regulations specified in 40 C.F.R. Parts 262 and 264. BIA must provide information to EPA as to how the drums are to be transported off the Facility for removal\disposal, the date(s) of transport, an inventory of the drums transported off the Facility, and the final destination of all drums and enclosed product. If BIA is not directly removing the drums, BIA must provide documentation from the responsible party testifying to the proper removal and disposal of the drums and all enclosed product.

43. The Work Plan shall provide for the prompt removal and proper disposal of all standing pools of sludge and\or other contaminants and surface soils that are visibly or otherwise detectably contaminated in all areas of the Facility.

44. The Work Plan shall provide for the appropriate remediation of all subsurface soil and/or groundwater contamination at the Facility that is discovered during the sampling and analysis tasks specified by this Order or otherwise undertaken by BIA or any third party. The Work Plan shall be periodically updated and supplemented with respect to appropriate site remediation as information from sampling and analysis tasks becomes available.

45. The Work Plan shall provide for the appropriate remediation of all subsurface soil and/or groundwater contamination, including contamination of Water Wells, off-site of the Facility that is shown probably to have been wholly or

partially caused by BIA. The Work Plan shall be updated during the first week of every month and supplemented with sampling information for site remediation as it becomes available.

III. SUBMITTALS

46. All submittals required by this Order shall be sent by mail to the following address:

Loretta Barsamian, Chief
Drinking Water Protection Branch
U.S. Environmental Protection Agency, Region IX
75 Hawthorne Street
San Francisco, CA 94105

ATTN: Cynthia Sans (W-6-3)
Alisa Wong (W-6-3)

47. All reports required to be submitted to EPA pursuant to this Order shall be accompanied by the following statement signed by a responsible BIA official:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on my inquiry of the persons directly responsible for gathering the information, I certify that the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

IV. GENERAL PROVISIONS

48. The provisions of this Order shall apply to and be binding upon BIA, its officers, directors, agents, successors and assigns. Notice of this Order shall be given to any successors in interest prior to transfer of the Facility or its operation. Action or inaction of any persons, firms, contractors, employees, agents, or corporations acting under, through, or for BIA shall

not excuse any failure of BIA to fully perform their obligations under this Order.

49. This Order does not constitute a waiver, suspension, or modification of the requirements of any federal statute, regulation, or condition of any permit issued thereunder, including the requirements of the SDWA and accompanying regulations. Issuance of this Order is not an election by EPA to forego any civil or any criminal action otherwise authorized under the SDWA.

50. This Order does not constitute a release of all claims regarding all conditions of operation or closure/post-closure of the well, nor does it necessarily establish all actions that may be necessary to respond to conditions revealed by the work required by this Order including further investigation or other response action.

51. Notwithstanding compliance with the terms of this Order, EPA is not precluded from taking any action authorized by law, including but not limited to, the issuance of additional administrative orders and/or the initiation of judicial actions against BIA. EPA expressly reserves the right to enforce this Order through appropriate proceedings.

52. Violation of any term of this Order, or failure or refusal to comply with this Order, may subject BIA to a civil penalty not to exceed \$5,000 for each day in which such violation occurs or if failure to comply continues pursuant to section 1431(b) of the SDWA, 42 U.S.C. § 300i(b). In addition, actions

or omissions which violate this Order and any requirements of the EPA's Underground Injection Control ("UIC") program may subject BIA to additional civil penalty liability of up to \$25,000 per day pursuant to §1423 of the SDWA, 42 U.S.C. § 300h-2.

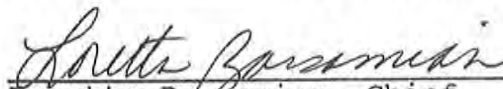
V. SEVERABILITY

53. The provisions of this Order shall be severable. If any provision or the application of any provision to any Party or circumstance should be declared by a court competent to be unenforceable, the application of such provision to other Parties and circumstances, and the remaining provisions of this Order, shall remain in full force and effect.

VI. EFFECTIVE DATE

54. This Order shall be effective upon receipt.

Dated this 16th day of June, 1995.



Loretta Barsamian, Chief
Drinking Water Protection Branch
U.S. Environmental Protection Agency, Region IX

cc:

Lindsey Manning, Tribal Chairperson, Duck Valley Reservation
Bill Beck, Environmental Protection Specialist, Duck Valley
Reservation
John Krause, Hazardous Waste Coordinator, BIA Area Office,
Charles Thomas, Acting Facility Manager, BIA Area Office
Steve Tibbetts, Superintendent, BIA Eastern Nevada Agency